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ABSTRACT

The purpose of this study was to gather, through historical examination of Santa Clara County and its educational institutions, "base-line data" for the development of useful models for educational planning. This paper describes the growth and development of schools in the county and presents a list of factors that have contributed to the inability of school districts to "be ready" for changing circumstances. Part one of this paper provides an overall historical perspective, explores what the term "school planning" has meant over time, provides an overview of the development of the County and its schools, and examines some of the decisionmaking methods useful in viewing school district development. Part two examines more closely the historical development of four somewhat different Santa Clara County school districts; and part three identifies some indicators and influences of educational change, develops some hypotheses concerning the influencer/indicator causal relationship, and offers six specific recommendations for future school planning. (Author/MLF)

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SCHOOL PLANNING IN A HISTORICAL SETTING: SANTA CLARA COUNTY, CALIFORNIA

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PROJECT SIMU-SCHOOL

SCHOOL PLANNING IN A HISTORICAL SETTING:

SANTA CLARA COUNTY, CALIFORNIA

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FOREWORD

Project Simu School was initiated to consider ways of improving and simplifying the process of educational facilities planning for the educational planners. The initial intent was to develop a highly sophisticated simulation capability through a national coordinating center for educational planning, but work early in the project suggested that a single large scale simulation procedure was not feasible and that facilities planning could not thus be separated from overall educational planning. The Simu School Project accordingly decided to develop planning procedures and techniques to aid the local educational planner and/or consultant.

The approach of the present project is to consider educational planning as an integrated process in which the facility becomes an integral part of the evolving education program and the teaching-learning situation. The products or output of the project, therefore, must be aimed at the total process of educational planning and the procedures and methodologies which comprise it. The final products will be applied by the local educational planning body, the educational system, or members of the community to develop a program of educational services.

Educational planning under these constraints is an interactive process between the components of the local community. The potential user of planning products ranges from the untrained to the highly trained and the planning products from very specific tools for specific needs to general planning methodologies and strategies. Project Simu School, therefore, is responding to the broadest possible spectrum of the needs of various levels of educational planning as well as to the actual range of individuals who may be involved in the process.

Historically, development of school districts and school houses in Santa Clara County responded to forces created by factors which just "happened" in the area. Policies governing development of communities were formulated without regard for the effects which they might have on educational programs. Responses made by school districts to the developments in the communities were made to meet immediate needs.

Marcella Sherman, principal author of this study, was Director of the Center for Planning and Evaluation of the Santa Clara County Office of Education when most of the research was completed. She is now Administrative Assistant to the County Superintendent. Major contributors were Mary Garcia, F. Barreda Sherman, Jr., and Paul Spindt of the staff of CPE, and Rick Cornish, editor.

This paper describes the growth and development of schools in the county and presents a list of factors which have contributed to the inability of school districts to "be ready" for changing circumstances. The recommendations made in the concluding section direct the attention of those who plan for educational programs and facilities to the "influencers" and "indicators" which can assist planning groups as they endeavor to avoid repetition of previous errors.

It is hoped that this documentation of what has happened in one area will provide an incentive for effective and timely planning for the future in other areas facing similar growth conditions.

Lester W. Hunt, Director
Project Simu School: Santa Clara County Component

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Several other sources were especially useful: the Gilroy Historical Society, where Mary Prine gathered together relevant materials from the Society's collection for our review; the California Room of the San Jose Public Library; and the Bancroft Library of the University of California at Berkeley.

INTRODUCTION

SIMU SCHOOL, through its several components, is seeking to improve the processes for educational facility planning. One of the components operates in Santa Clara County, California, and is sponsored by the County Superintendent of Schools.

Santa Clara County lies at the southern tip of San Francisco Bay. The county is 1,300 square miles in size and may best be described as a fertile valley with low mountains of the coastal range lying on either side. Its major city, San Jose, is approximately 50 miles southeast of San Francisco.

The purpose of this study is to gather, through historical examination of Santa Clara County and its educational institutions, "base-line data" for the development of useful models for educational planning. These models will be subsequently tested and modified through use in local districts and, in their final forms, will ultimately serve to improve planning processes for school districts everywhere.

Santa Clara County is at present experiencing a rapid increase in population and, with it, an accelerated movement from an agricultural economy to a highly industrial one. Its transformation from a county of fifteen incorporated cities and towns to a single metropolitan area with a population of well over one million makes Santa Clara County an excellent subject for studying American urbanization and the implications for educational facility planning. Moreover, its communities and school districts reflect a variety of positions along the growth/industrialization continuum.

While the greatest changes in Santa Clara County have occurred in the last twenty-five years, many historic influences are still at work. To set the stage for recent events, this paper will therefore review briefly the area's two hundred years of development under the white man's rule. The study is divided into three major parts. Part One provides an overall historical perspective. It explores what the term "school planning" has meant over time, provides an overview of the development of the County and its schools, and examines some of the decision-making methods useful in viewing school district development.

Part Two examines more closely the historical development of four somewhat different Santa Clara County school districts: San Jose Unified, the oldest school district and the one that encompasses downtown San Jose; Los Altos Elementary School District, which serves an affluent community, has a declining school population, and now must close schools and dispose of sites; and Gilroy and Morgan Hill Unified, districts serving agricultural communities in the southern part of the County which face rapid development in the next decade.

Part Three identifies some indicators and influencers of educational change, develops some hypotheses concerning the influencer/indicator causal relationship, and offers six specific recommendations for future school planning.

PART ONE: A PERSPECTIVE

School Planning in a Historical Context

Today, educational administrators and school planners tend to talk about "school planning" as though the term has a common meaning for professional educators, school architects and laymen. But there is considerable discrepancy between "school planning" as described by, say, the Council of Educational Facility Planners and school planning as it occurs in most school districts. The concept of school planning has not been a static one, but has evolved with the historical development of education and of this country.

The nation's first graded school began in Boston in 1847. Until then, the one-room schoolhouse had prevailed, and was to prevail for some time to come in many places. Often the one-room "school" was simply space provided in a home, a store, or a farmer's storage shed. Such was the case with the first school to open in California after it became a state in 1850. Known as the "first American school," it was opened in a dilapidated structure on the grounds of the Santa Clara Mission.

But with the first graded school came changes in facility design which would eventually be felt in the nation's most rural areas. Multiples of the rectangular one-room schoolhouse would be built under one roof, and in many towns and cities, single-story structures would be designed with the potential for expanding upward. Schools were built by local carpenters or contractors, and tended to look much alike.

By 1860, American education had undergone dramatic changes. The right to tax for support of public education, the key to state school systems, had been settled, and the various types of schools generally had been amalgamated into state systems. The first compulsory school attendance law had been passed (Massachusetts-1853), and the high school had replaced, for the most part, the Latin Grammar School and the academy. The subjects taught were more or less fixed, as was the method of instruction. Reading, spelling, grammar, arithmetic, geography and history were the standard fare. The "drill and content" course of study did not make it necessary to change the building design, and so more rooms were added but few innovations occurred.

While the Civil War tended to slow internal development, the post-war years saw a rapidly expanding public education system. Teacher training institutions sprang up throughout the country, manual training programs began, and kindergarten, with its emphasis on the young child's development as a social being, became an accepted part of the public school. Moreover, the years leading up to the turn of the century saw the growing influence of European theories of education. Pestalozzi stressed sense perception and contact with real things, Herbart emphasized history, geography and literature, and Froeble began the kindergarten with its use of play, activity, music and games.

By 1900, school organization in this country had become somewhat set. Eight grades constituted the elementary school and four years of further study represented the high school course. The aim of education was primarily to impart knowledge through formal methods, and content tended to be restricted, with "more of the same" being added at each successive level. Courses were largely academic and all of the children in attendance received the same instructional treatment.

If "planning" means to "initiate, promote, and control to produce change," little real educational planning had been done by 1900. School boards accepted suggestions, plans and specification from State and County Superintendents, or left the matter up to a big-city architect who presented his plans to the Board with little input from them or anyone else in the community. Since course work and method of instruction had for the most part been standardized, facility design was also standardized. California, despite its different climate, persisted in copying the school house of the East and Midwest.

Caughey (1940, p. 593) complained:

> At rare intervals a school board has authorized a functional structure designed to take full advantage of the sunlight and the fresh air that are California's priceless heritage, but most of the buildings from kindergarten to college are stereotyped imitations of mid-western business blocks or medieval castles, with occasional influences from the Greeks, the Gothic, the Victorian, or the "Kickapoo Colonial."

School boards responded mainly to the numbers of children to be educated, and added a room or a story, or built a new school when conditions became too crowded. Schools were initially built where the population was, but once the school land was owned, the site remained in use with no re-evaluation. Any new site was usually selected because it was a gift or because it could be purchased cheaply. Rarely was the right of "eminent domain" employed since school people, needing taxes and bond issues passed, could not afford to offend members of the community.

Early in the twentieth century, the drive for better educational facilities gained momentum. This was due in part to the leadership of state school officers, the Office of Education, and the National Education Association. Too, institutions of higher learning began developing instructional materials to train facility specialists, surveys were conducted to determine the appropriateness and adequacy of existing structures, and standards for school facilities were beginning to be developed.

With this growing concern on the part of professionals, the facilities began to better reflect the educational program. Spaces for manual training, domestic science and sewing were provided in rooms with good natural lighting. Directed play and physical education were getting more attention, and playrooms and a gym were often located in the basement--the gym under the assembly hall or auditorium. The auditorium was valued as a unifying element which could be used for parent and community meetings.

In California, after the 1906 earthquake destroyed a number of school buildings, there was an immediate trend away from the multi-storied school building. The "university plan," or modifications of it, capitalized on the California climate, and "hallways" were commonly moved outdoors. A practical adaptation of the old Spanish Mission design to school architecture became popular, with a series of classrooms grouped around an open court. Classrooms also opened onto a covered outdoor corridor. Generally, the shape of the structure was that of a large D. Many structures of this design are still in use or were until recent enforcement of the Field Act (an earthquake precautionary measure) forced districts to abandon them.

By 1917, the Federal Government began supporting both physical education and vocational training, which gave impetus to the development of suitable facilities. Also, proper nutrition for the school-age child was becoming an important issue, and cafeterias and lunchrooms began to appear in plant designs.

Of course none of the changes described took place all at once. In 1935-36, 38% of the school buildings in use had been built before 1910 and were housing 20% of the pupils enrolled (according to a survey by SERA and WPA). Commenting on this sort of lag, the California State Department of Education pointed out that:

> The educational usefulness of a school building is closely related to its age. As a general rule, those school buildings constructed before 1910 are obsolete and inadequate to meet the demands of a modern school program and are so constructed that remodeling in accordance with modern standards is extremely difficult and costly, if not impossible. (1969)

By the 1920's, detailed standards and procedures for "scoring" facilities evolved. George Strayer and N.S. Engelhardt of Teachers College, Columbia, were leaders in this development with the "scorecard" method of determining space efficiency. The Strayer-Englehardt Scales enabled a school to be "rated," with a perfect building receiving a score of 1000. In an elementary school, 125 points were allowed for size, form and location of the school grounds; 165 points for placement and general internal and external structure; 280 for the service system, (heating, ventilating, etc.); 290 for classroom location, equipment, cloakrooms and finish; and 140 points for special rooms, offices and service rooms. As mechanical and rigid as the scorecard method may seem, it did focus attention on factors that were often given little attention by nonprofessionals.

Next came the survey movement. Existing buildings were scored, the density and location of the school population was mapped, growth and population shifts were calculated and the results were plotted on district maps. Most "master plans" today, usually required by State Departments of Education, include this type of information.

In 1927, the California State Department of Education established the Division of Schoolhouse Planning. Its duties: to establish school

building standards; to review and approve, except in urban districts, plans and specifications; to provide standard plans, specifications and building codes for school districts or their architects; and to conduct surveys which would determine the building needs of school districts that requested this service. Also, the Division was to suggest ways in which the districts might finance the cost of new facilities.

With the establishment of the Division of Schoolhouse Planning a number of battles ensued, some still unresolved. First, there was the battle for power in decision-making. Governing boards of districts were responsible for acquiring facilities and operating educational programs. Architects, by tradition, drew up the plans. By law, the County Superintendents were to approve all plans for construction. The Board, of course, was supported by the vote of the electorate and it was the public that voted approval for bonds or additional taxes. On the other hand, the Division could set standards and approve plans. To the architect, the Division posed a double threat. It could cut out a pet idea of the architect, or worse, drive a wedge between the architect and his client.

Another battle was that of cost versus quality. The Division saw its job to be preventing waste in construction, improving the health and safety of pupils, and making the facility appropriate to the needs of education as perceived by the Division. While cutting exterior decoration, wide corridors and the like to save money, the Division generally increased over-all costs in the pursuit of tasks two and three.

While the Division of Schoolhouse Planning was not initially given power over the choice of sites, later legislation required districts to get written recommendations on that, too. If the Division failed to approve the site, the District was required to wait thirty days before doing as it wished. The Division's concern was two-fold. First, it wanted school districts to have competent assistance in selecting school sites and, second, it urged the districts to use every legal device, including condemning property, in acquiring the best site for the least amount of money.

The Division also urged districts to take time for planning. Districts tended to wait until schools were overcrowded before doing any planning, and they waited to engage an architect until a bond issue was passed. The Division therefore moved to require districts to develop a master plan which would include the location of all the facilities needed to accommodate the maximum number of students. It was a battle getting the school districts to move in this direction, however, even when the Division volunteered to help.

Districts generally tended to resent anything that came between them and their architects, and the Division's suggestions and plans were usually not well received. By 1927, legislative efforts were being made to eliminate the Division of Schoolhouse Planning. In 1933, a major earthquake in Long Beach caused quick passage of the Field Act, giving the State the supreme authority in providing for structural safety in school buildings. The State Division of Architecture was given the responsibility for administration of the Field Act, although plans had to be

approved by the Division of Schoolhouse Planning before going to the Division of Architecture. During the years that followed, the Division became more consultation-oriented, thus signaling an end of the earlier battles.

By the mid-forties, school districts had begun to move from acquiring "available" land to acquiring land better suited to school needs; from accepting land "gifts" to purchasing parcels that represented sound, long-term investments. The districts began caring less about sites that would "show off" the school and more about factors that would contribute to the most effective and economical operation of the plant. Too, rather than placing buildings on new sites without consideration of future building, districts were now implementing master plans.

Changes in the facilities themselves had begun by this time to reflect both new directions in education and advances in technology. As suggested before, multi-storied buildings with basements gave way to the one-story plant, and "finger-type" plans became popular. Such plans provided good natural lighting, cross-ventilation, an outdoor classroom for each indoor room, and the possibility for easy expansion of the facility. Dark floors and fixed furniture were abandoned; light interior colors and acoustical ceilings became standard, along with furniture designed for flexible arrangements.

With reorganization of California's State Department of Education in 1947, the Division became the Bureau of School Planning and was made responsible to the Chief of the Division of School Administration. The period between 1947 and 1957 is sometimes regarded as a decade of state-aid domination. In 1947, a $350 million bond issue was approved to implement a state-controlled loan and grant program for districts unable to provide needed facilities within the legal limitations placed on school districts. The State Allocation Board controlled this program and conflicts sometimes occurred. The Bureau of School Planning might approve a plan only to have the Allocation Board turn it down, since that Board was concerned mainly with costs and not with educational needs.

Since 1957, a number of factors have made it possible for the Bureau of School Planning to assume a more positive role in helping districts better accommodate current changes in educational practice, anticipate facility needs arising from educational trends, and incorporate flexibility in school design in order to deal with changes as yet undefined.

In the last twenty years schools have begun paying greater attention to individual and social needs. This trend has been reinforced at the Federal and State level by the allocation of funds for a variety of special need programs. Programs for adults, the disadvantaged, the handicapped and the bilingual have all underlined the need for new educational methods and the facilities to house them.

Until very recently, the only people involved in school planning were the superintendent, the Board, the architect and such sign-off agencies as might be required, such as the Bureau of School Planning. Within the last few years, however, schools -- and the process by which they

are planned -- have been re-examined in a much broader context. Jeanne Dost, in a paper presented at the Western Regional Science Association in 1968, discussed the school as multi-functional within a broad socio-economic framework.

> This proposed extension of the role for the school implies that educational planning should be re-examined within the context of total urban planning by interrelating social, cultural, and economic goals in the school investment decision-making process. (Dost, 1968, p.1)

Theodores et al., in a 1968 publication of the Council of Facility Planners, said:

> Depending upon its design characteristics, a school building will tend to encourage or inhibit certain instructional program, instructional methods, patterns of student and staff interaction, patterns of neighborhood organization, and patterns of cost for operation as well as for construction.
>
> Planning a physical facility for education use, therefore, is a complex process: it requires attention to political, social, fiscal and technical/professional components. Attention to all these components is not likely to be provided by any one of the interested parties. These various parties include: the local school board and its superintendent and staff; local voters and taxpayers; the architect; the State Educational Agency; planning bodies, police, fire, civil defense and disaster agencies; manpower agencies, and others. (p.5)

The 1971 Guide for the Development of a School District Long-Range Comprehensive Master Plan, prepared by the California Bureau of School Planning, sees one of the purposes of the master plan as the coordination of a program of total school and community planning. Although a "planning committee" is to conduct the development of the master plan, it is to assure that "there is total staff and community involvement in the plan development." Wilson Riles, the California State Superintendent of Public Instruction, in the foreword of To Plan a School (1971), states:

> Effective school planning is a coordinated effort. It requires the participation of school district administrators, school principals, teachers, architects, laymen, and specialists in projecting enrollments, selecting teaching equipment, designing lighting arrangements, and providing for acoustics.

The concept of school planning is a dynamic one. In its evolution it has changed to meet the needs of our educational philosophies, our teaching methods and, indeed, our society.

AN OVERVIEW OF THE HISTORICAL DEVELOPMENT OF SANTA CLARA COUNTY AND ITS SCHOOLS

Before 1850: Hides and Tallow

During the latter part of the eighteenth century, the Santa Clara Valley served as a corridor for Spanish explorers and colonists traveling between Monterey and San Francisco. San Francisco Bay had been discovered by Portola in 1769, but with the Russians at several locations in California, the Spanish needed to select and develop strategic sites to protect their position. Their established positions extended from San Francisco to San Diego, each site consisting of a mission and a presidio or military garrison.

On January 12, 1777, the Valley's first mission, Santa Clara de Asis, was founded by Father Junipero Serra on the banks of the Guadalupe River. From the Mission, the valley--and subsequently the county--derived its name.

In order to make the presidio and mission self-sufficient, the Spaniards usually established a pueblo or farming community to serve as a production center. On November 29, 1777, El Pueblo de San Jose de Guadalupe was founded. This was the first civilian settlement to be established in California. Each of the original 14 families in the San Jose Pueblo was given supplies and land by the Spanish government and additional lands for grazing were conceded. These private land grants were known as ranchos.

In establishing the missions, Spain made use of the religious and humanitarian zeal of the padres by assigning them to the Indians as preachers, teachers, and disciplinarians. The purpose was to further colonize a vast land with those who would then be loyal to Spain. The Indians were to serve where there were too few Spanish colonials to fit the need (Johnson, 1964, p.32). The missions, then, were established as temporary institutions for the purpose of indoctrinating the Indians in Christianity and training them in the skills which would permit them eventually to take over and "hold the land for the king" (Childers, 1930, p.708). It was expected that within the span of ten years the Indian would be able to run his own pueblo subject to civil law and under the guidance of the regular clergy. The goal was not realized, however, since the Indians were not sufficiently advanced to reach such a goal in the short period anticipated.

Laymen got into the business of educating the Indian in 1790 when the Governor of California called for artisans and mechanics to work under a five-year grant, moving from mission to mission and training Indian apprentices. Under this program, the San Jose Pueblo had instructors in tile-making, furniture making, smithing, carpentry and cobbling.

In 1793, an order came from the King of Spain commanding all towns of Alta California to establish schools to teach Indians reading and writing. The order also forbade the use of native languages. Governor Borica in 1794 sent orders that a school be established in San Jose, and that all parents send their children to school at a monthly rate of two and a half reales. At this time, some parents had been teaching their children and their neighbors' children reading and writing. Manual Vargas had already started San Jose's first formal school in an adobe granary. Governor Borica, during a visit to the school, rebuked Vargas for "too much indulgence in aguardiente" (local whiskey) -- a vice, he declared, "not to be tolerated in a teacher" (Childers, p.77).

By 1799, there were six schools operating in Alta California. Attendance was required of children over seven and under ten, and of noncommissioned officers who could not read or write. The curriculum consisted of reading, writing and Christian Doctrine. Formal training among the pueblo teachers was scarce, and the few texts available to them consisted of histories and volumes of verse. At best, the pueblo schools functioned sporadically and many closed completely after a short time. With the inertia of cultural disinterest, with commitments to agriculture and ranching, with a lack of finances, facilities and personnel, and with an imported class system in which only the upper classes were educated, it is little wonder that even royal and governmental decrees did not succeed in establishing a lasting educational system.

But the Spaniards did bring agriculture into the Santa Clara Valley. The fruits and garden crops introduced adapted easily to the area's climate, and on the ranchos cattle were raised for meat, dairy products, hides and tallow. With Mexican independence in 1824 came increased production in the fertile Santa Clara Valley. Hides and tallow, by then the center of economy, were easily shipped up the Bay to San Francisco and a worldwide market. But on the education front, progress was slow. There were marked disagreements between the Church and the civil authorities, and the result was secularization of the missions. Although attempts were made by the government in Mexico City to legislate appropriate laws for creating a school system, unfunded plans went unrealized.

There were, however, rancho schools with the peripatetic schoolmaster moving from ranch to ranch, "boarding around," and receiving for his efforts meals, lodging and laundry service. Pupils were taught dancing, music, and religion, and the ladies were instructed in "amicability" (Childers, p.112).

In 1846, the year the Americans took over California, there were two teachers working in San Jose and one in Santa Clara.

1850-1900: Hay and Grain

The American emigrant brought his school with him to California in his covered wagon or his traveling bag. Children were taught their spelling, arithmetic, and geography on their trek westward. This practice was not discontinued when the emigrants reached California. The new residents

also brought with them a set of other ideals and public education copied eastern schools, particularly those of New England and New York. This "seemingly inborn idea of public education" -- the desire of Americans to perpetuate their institutions -- was especially felt in San Jose (Childers, pp.182-3). The period of transition between education under the rule of Mexico and under an American educational system is sometimes called the period of the Emigrant Schools (Herron, 1916).

The first American school in California was founded at the Santa Clara Mission on December 15, 1846, by Mrs. Olive Mann Isbell at the request of persons settled in and around the Mission. Ferrier (1937, p.13) provides the following description:

> A room in a dilapidated structure on the Mission grounds, which room has been used previously as a stable, was fitted up for the purpose; boxes were used for seats, and provision was made for a fire on the stone platform in the center, with a hole in the tile roof for the escape of the ascending smoke which failed often to ascend. The roof had many leaks, and the earth floor was often wet and damp. The school room supplies were limited to a very insufficient number of textbooks of limited variety. There were no slates, no paper, no pencils for school-room use. The teacher had a lead pencil which she used at times to print on her hand some difficult letter with which she desired to acquaint her pupils. There were approximately twenty-five children in attendance, and the school was conducted for two months.

Another example of a makeshift school was Grandma Bascom's blue tent which served as a school house in San Jose and as a church. The school was opened at the request of a Mr. Blakeslee, and Mrs. Bascom taught in the tent all winter in 1849 (Foote, pp.72-3). In South County, Gilroy's first school was operated in the home of John Bane during 1852. Between 1850 and 1870, cattle ranches were more and more confined to the hills on the east side of the valley; in the valley more grain and forage crops were planted for use in feeding sheds. Between 1870 and World War II, fruits and vegetables would become the principal crops. More profitable to grow in the Valley's rich soil, such crops -- along with their related manufacturing and services -- would become Santa Clara County's principal source of income.

When Peter Burnett became California's first civil governor in 1849, there were no provisions for creating an educational system for the State. Burnett called an election for a Superintendent of Public Instruction; John G. Marvin was elected and took office in February of 1851. In his first report to the Legislature, Marvin declared that there were 5,000 to 8,000 children between the ages of four and eighteen in California and that one-fourth of these were the descendants of Spanish Californians who were as yet "unconvinced of the necessities of education," but who, if they were to compete with Anglo-Saxon children, would find their "want of education" apparent. Marvin urged that they be included in the state program. He requested, among other things, a

uniform series of texts and the substitution of French and Spanish for Latin and Greek in the curriculum. Later that year Marvin returned with a bill, easily passed by the Legislature, providing for the survey of school lands, the apportionment of school monies and the formation of school districts. It was also the first document to clearly define the Superintendent's duties.

In 1850, Santa Clara County had been incorporated with boundaries marked off to contain about 1300 square miles. The County was composed of nine political townships: Almaden, Alviso, Burnett, Fremont, Gilroy, Milpitas, Redwood, San Jose and Santa Clara (Foote, p.76). San Jose was incorporated in 1850 with a population of 3,000 and was the County's largest population center. The subsequent growth of San Jose in that century is seen in these population figures: 4,600 (1860), 9,100 (1870), 12,600 (1880), 18,100 (1890) (From INFO Commentary No. 222, April 1967, Santa Clara County Planning Department). Few figures are available for that period for other cities in the county, and several of the original townships have vanished from the political map.

In January of 1856, a system of common schools was established in San Jose by an ordinance which created the Office of School Superintendent. Three years later, the County of Santa Clara was partitioned into eighteen school districts, ten within the San Jose Township and four each in the Fremont and Santa Clara Townships. That year's ADA for public schools in San Jose was 146.

Of the twenty-eight schoolhouses built in the County during the ten years that followed, many were deemed less than adequate by the County Superintendent. Most school districts failed to vote taxes, or enough taxes, for the facilities. In 1866, State Superintendent John Swett stated that twenty-four of the county's schools were a disgrace to the State (Herron).

Still the leader in growth and population, San Jose stood out in its effort to meet the educational needs of its children. In 1865, the Mayor of San Jose told the city council that the two public schools in San Jose were full and there was a need to build. A year later, four new one-story buildings had been constructed, and in 1868 an eight-room school costing $20,000 was opened. Declared a "magnificent edifice," it was provided with both water and gas and had an exhibition room in its attic.

San Jose's first high school was begun in 1865. Initially combined with the grammar school and comprised of only five students, the school graduated its first class in 1873. The two-year course of study was extended to three years in 1877, and still another year was added in 1897. In the beginning of the secondary school, however, little in the building or in the basic course of study differentiated it from the grammar school.

By 1879, there were only 16 high schools in all of California. The new California Constitution had applied state school tax for primary and grammar schools only. The popular feeling was that until public education was available for all young children, tax monies should not be spent

for high schools. In 1891 a bill was passed which made it possible to establish a high school by a vote of the people of any city or incorporated town of 1500 or more, and to create a union high school by the vote of any two or more adjacent districts (Ferrier, p. 91).

Before 1900, four colleges were started in Santa Clara County. In 1851 two were chartered: the University of Santa Clara and California Wesleyan College (later moved to Stockton, renamed College of the Pacific, the University of the Pacific). In 1872, San Jose was selected as the permanent site of California's first State Normal School. During its first four years of operation, the school granted 440 degrees. In 1884, Leland Stanford announced plans for a university in the northern part of Santa Clara County. Endowed with property worth $10,000,000 on Stanford's Palo Alto Rancho and $30,000,000 in trust, Leland Stanford Junior University opened its doors in 1891.

1900-1940: Toward a Fully Integrated Agricultural Community

(Note: Table 1, which provides population data by decade from 1900 through 1970, will be a useful point of reference throughout the rest of this section.)

The County Planning Department, in its A Study of the Economy of Santa Clara County, Part 1 (1967), describes the 1870-1940 period as the "fruits and vegetables era." With the profitable production of fruit and vegetables underway, new markets were needed. In 1869, the Southern Pacific Railroad Company had connected San Jose to Niles, which tied in with SP's main line from Oakland to Sacramento. This gave San Jose a transcontinental outlet for its agricultural products.

Fruit could be grown without irrigation in the western hills (around Los Gatos) where the rainfall was adequate and there was protection from frost. This "warm belt" became a choice location for orchards. Apricots were among the first and most successful of the trees planted; the French prune, which later became synonymous with Santa Clara Valley, was introduced in 1856. By 1930, 65% of the crop land was orchard, and 48% of this land was producing either apricots or prunes.

Manufacturing efforts in the late decades of the nineteenth century and early in the twentieth century were primarily an outgrowth of agriculture. (The lack of coal in California forbade the kind of manufacturing prevalent in the East and Midwest.) The difficulty of shipping fresh fruit stimulated fruit-drying processes as early as the 1870's, and by 1871 the canning industry was begun with the canning of surplus peaches and pears. Many of the canneries established before 1900 prospered and dominated the national industry by the 1930's. Government demands for canned foods during World War I stimulated production, and by 1920, 35 canneries were operating in the Valley. Increased mechanization and improved techniques enabled them to meet increased agricultural outputs and the area became one of the nation's most important centers for fruits and vegetables.

TABLE 1

Historical Population of Cities and County
Santa Clara County, 1910-1970
(in 1,000's)

From INFO Commentary No. 222 (April, 1967) and Santa Clara Valley Plans (December, 1971) prepared by Santa Clara County Planning Department.

City	1900	1910	1920	1930	1940	1950	1960	1970
Total S.C. County	60.2	83.5	100.7	145.1	174.9	290.5	642.3	1066.4
Alviso	b	0.4	0.5	0.4	0.7	0.7	1.2	Now a part of San Jose
Campbell	**	**	**	**	**	**	11.9	24.8
Cupertino	**	**	**	**	**	**	3.7	18.2
Gilroy	1.8	2.4	2.9	3.5	3.6	4.9	7.3	12.7
Los Altos	**	**	**	**	**	**	19.7	24.7
Los Altos Hills	**	**	**	**	**	**	3.4	6.9
Los Gatos	1.9	2.2	2.3	3.2	3.6	4.9	9.0	23.7
Milpitas	**	**	**	**	**	**	6.6	27.1
Monte Sereno	**	**	**	**	**	**	1.5	3.1
Morgan Hill	**	6.0	0.6	0.9	1.0	1.6	3.1	6.5
Mountain View	**	1.2	1.9	3.3	3.9	6.6	30.9	54.2
Palo Alto	1.7	4.5	5.9	13.7	16.8	25.5	52.3	56.2
San Jose	21.5	28.9	39.7	57.7	68.5	95.3	204.2	445.8
Santa Clara	3.7	4.3	5.2	6.3	6.7	11.7	58.9	87.7
Saratoga	**	**	**	**	**	**	14.8	27.1
Sunnyvale	**	**	1.7	3.1	4.4	9.8	52.9	95.4
Total Incorp.	c	49.9	60.7	92.1	109.2	161.0	481.4	914.1
Total Unincorp.	c	33.6	40.0	53.0	65.7	129.5	160.9	152.3

**Not Yet Incorporated
a Info. from 1910-1970 U.S. Census
b Figures not available for incor. area
c Unable to complete with available data

As the economy of the Valley and the population grew, so did the educational needs of its children. In 1907, citizens passed bonds making $175,000 available for a new high school. The new San Jose High School, which opened the following year, was the pride of the city and was featured on souvenir and public relations brochures for years. Designed by a Pasadena architect, the school reflected new trends in education and achievements in technology. Sawyer (1922) described the new facility in some detail:

> The San Jose High School is perhaps the first high school building constructed on the university plan. It consists of five separate and distinct buildings, so grouped and connected as to form one general whole. The administration building, with its massive towers, is the central feature; on either side are the classical and science buildings; at the rear of these are the domestic science and manual arts buildings. They are all of the same type of architecture, with rough cement plaster exteriors and red tile roofs, and are connected by three cloisters. One of these runs through the towers between the east and west entrance and is crossed by the other two which extend from the classical and science buildings to the rear end of the group. Each of these two side cloisters leading to the side entrances of the assembly hall in the main buildings. The east cloister also passes an open court around which are located the various departments of the manual arts building.

In December 1915, the California State Board of Education authorized publication of 1000 copies of a high school directory. The high schools and student populations reported in Santa Clara County were: Campbell, 118; Gilroy, 136; Los Gatos, 124; Morgan Hill, 85; Mountain View, 135; Palo Alto, 287; San Jose, 1377; Santa Clara, 144. Course offerings listed in a similar directory a few years later may reflect differences in the populations served and in the educational philosophies of several Boards of Education. In Campbell High School, for example, Latin, physics and medieval history were taught, as well as carpentry, farm mechanics and blacksmithing. In Gilroy High School, French and business courses were offered in the evening while Morgan Hill, with a small student population, offered two years of Spanish and no manual arts. Palo Alto included courses in military tactics, architecture and mechanical drawing and San Jose boasted offerings in French, Spanish, Latin, dressmaking, pattern making, agriculture and banking.

In 1920, San Jose had nearly 10,000 students, and the bond election made $400,000 available for high schools and $300,000 for elementary schools. Polytechnic High School was built a year later; and an indoor gym, eight classrooms and a lunchroom were added to each elementary school. In 1922, the elementary schools in San Jose were appraised at $736,000.

The economy of California and of the Santa Clara Valley had, by the mid-twenties, become integrated with the rest of the country. Growth now had to be supported by means other than the exploitation and processing of natural resources. In 1931, the San Jose Chamber of Commerce printed a booklet entitled Santa Clara County, California:

"The Valley of Heart's Delight". Designed to attract both workers and industry, the booklet boasted "700 manufactories" and an annual payroll of more than forty million dollars. In describing the County's nine high schools, four junior highs and eighty-six elementary schools, the booklet especially highlighted their cost and playground space.

By 1940, the Santa Clara Valley was largely developed. Besler (1970) sees the area at that time as a textbook example of a fully integrated agricultural community where the cities were functionally related to the whole complex. In 1940, San Jose, the county seat, was the center of the food processing industry and related industrial development. Stanford University, with Palo Alto (a community of about 17,000 people) was the focus of the northern end of the Valley. The other towns -- Mountain View, Sunnyvale, Santa Clara, Los Gatos, Morgan Hill and Gilroy -- ranging from 1,000 to nearly 7,000, were distributed around the Valley and were service centers for roughly 100,000 acres of orchards and 8,000 acres of vegetable crops. As Besler (1970, p.2) summarizes it: "At this time Santa Clara County called itself the 'Valley of Heart's Delight.' It was beautiful, it was a wholesome place to live, and it was one of the 15 most productive agricultural counties in the United States."

1940-1970: "Slurban" America in the Making

During the years of World War II, the agricultural products of Santa Clara County were in greater demand than ever before, and both agriculture and its related industries boomed accordingly. But with new needs brought about by the War, industry became more diversified. In 1940, only eight per cent of the work force in the County was involved in the manufacture of products not related to agriculture. By 1951, more than half the workers earned their living outside agri-business and related industry.

Between 1930 and 1940, the population in the county had increased by 29,800; in the next decade, it increased by 115,600. The War was, of course, behind this startling increase. A great number of workers had come to California to build ships and aircraft and many elected to stay. Also, many servicemen who had stopped over in California on their way to the Pacific returned to work and live in the state.

By 1945 subdividers had already begun purchasing orchards, clearing the land and building tract homes for returning veterans. The agricultural land lost to the subdividers is reflected in the fact that between 1951 and 1966, the income from fruits, nuts and berries dropped from $40,005,000 to $28,599,000. In 1950, the city of San Jose came under a new and aggressive administration whose avowed goal was to make San Jose the Los Angeles of the North, and the expansion that followed was largely uncontrolled.

Land developers bought land where it was cheap, usually in undeveloped "county" areas, which were soon annexed to the city and supplied with streets, sewers, etc. Growth was the policy pursued at all costs and

without consideration of consequences. With development scattered it was both difficult and costly to provide urban services and tax rates soared accordingly. "San Jose," according to the Stanford Environmental Law Society (1970), "represents what can happen when a very aggressive city government is responsible to only a narrow constituency and is dedicated to shortsighted goals."

In 1955, the "Agricultural Exclusion Act" was passed. This law provided that land zoned for exclusive agriculture could not be annexed to a city without the owner's consent and that the city could not annex more than 500 feet of county road without taking in the adjacent property. This legislation frightened the cities, and in the 90 days between the passage of the legislation and the time it went into effect, the cities annexed wildly. Small unincorporated communities, afraid of being swallowed, became incorporated. Where there had been nine incorporated cities in Santa Clara County in 1950, seven more were added in a brief few years. Each of the cities and the county enacted its own development codes and confusion reigned. Developers took advantage of the confusion to erect marginally standard dwellings on small lots--sometimes in areas known historically to be flood plains. FHA and VA underwrote many of these developments.

Social dislocation was another outgrowth of the County's explosive development during the 1950's. Farm workers were displaced and, lacking the skills to move into the new aerospace, electronics and other science-oriented industries, many were forced to go on welfare. The farmers themselves were, and continue to be, under immense pressure to sell out to developers.

As could be expected, the effect of the building boom on education was serious. School districts were unable to catch up with, much less stay abreast of, the demands of the growing population. Most districts found themselves on double sessions even when they were building one or more new schools a year. School boundaries were being redrawn each year in an effort to make use of all available classroom space.

By the 1960's, attention had been drawn to the adverse effects of segregation on learning. By this time, however, the County's "expansionists" had developed concentrations of both low-cost and high-cost housing, and segregated neighborhoods were the result. Mexican-Americans and blacks lived in the older sections of San Jose and on its East Side, while the more affluent whites moved to the west side or the more expensive communities up the Peninsula.

Today, Santa Clara County has 33 school districts (plus four community college districts). They range from a one-school district serving about a dozen children to the massive San Jose Unified School District which serves 36,806 students. The total K-12 population as of October, 1972, was 282,604.

PART TWO: FOUR DISTRICT CASE STUDIES

San Jose Unified: A Case Study

During the early years of San Jose's public school system, planning was a loose and informal process. Schools were built as they were necessary and could be afforded. What's more, they were located according to the availability and price of land. The first four schoolhouses, one for each ward of the town, were built on donated land and consisted of eight classrooms, four on each of two floors. Predictions of future demands for services were determined by a majority of "I reckon's" on the school board. Because change was neither intense nor rapid, planning, as a formal operation, was deemed unnecessary and even frivolous.

By the turn of the century, however, growth had become steady, and with it, school services expanded. In 1925, San Jose Unified changed from the 1-8 grade division with no special distinction between elementary grades and junior high, to its present grade structure: 6 years of elementary school, 3 years of junior high and 3 years of high school. The district had expanded its staff and facilities to handle a total enrollment of about 11,000 children and, in addition to the business office, the district now staffed a guidance office providing a variety of non-teaching educational services.

Before 1940, the district had been able to cover capital outlay expenditures for the renovation of extant facilities, the purchase of new sites, and the construction of new plants, without straining the tax-paying public inordinately. In fact, only twice during this period had it been necessary to assess a special building tax to be added to the normal tax rate: at the height of the inflation preceding the depression of '29, fifteen cents was added to the normal tax rate; and in '32-'33, when the supply of money was severely limited, two cents was added.

But when the post-war population boom made it apparent that the demographic character of the city was going to change radically, San Jose Unified girded itself by initiating a major building program. Funded through federal and state monies as well as local taxes, the program was to continue through the 1950's and result in the present distribution of facilities. Some insight into the practice of planning is gained by the examination of this building program, its intents and its results. The case of Broadway Elementary in Willow Glen is particularly useful in this regard.

Willow Glen is a residential neighborhood subdivision of San Jose comprised almost exclusively of single family dwellings, with commercial strips lining the main streets, Willow Street and Lincoln Avenue. Once a small-plot farm area, its present form evolved as new houses were interspersed between existing houses. As a result, and unlike most residential subdivisions in the San Jose area, there are houses of various ages in the neighborhood.

In 1945-46, Willow Glen had two elementary schools, Gardner and Willow Glen, serving 500-600 children. With post-war growth applying pressure on the two schools, San Jose Unified moved into action and by mid-1946, the school board had passed "the usual resolution for acquiring property by condemnation." A parcel was eventually chosen midway between the two existing schools at the corner of Willow Street and Lincoln Avenue.

Several factors entered into the selection of the site. "On the basis of available data," commented Dr. C. L. Suffield, the district's thorough business manager, in a letter to the board, "there exists or impends an acute shortage of educational facilities," in the Willow Glen neighborhood. Dr. Suffield recommended that the land on the corner of Willow and Lincoln be acquired and that on the site should be built a school of from five to seven classrooms for grades K-4 only. Suffield went on to point out that a number of children were walking more than 1/2 mile to school presently and that many were forced to cross busy Lincoln Avenue. The proposed site would solve this problem. Suffield explained that the area was well built up and that the district was lucky to get the two acres at the Willow-Lincoln site. While the site "cannot be considered sufficiently large to build a large elementary school plant," Dr. Suffield noted, "younger children need less play area." Hence, the limit to the lower grades.

In late 1946, the board commissioned Ernest J. Kump as the architect for the new school. He was advised in a memo from the superintendent that the school was to be "a neighborhood school, homogeneous of pupils and parents and encouraging intimacy between parents and teachers." He was given no other instructions.

In February of 1947, San Jose Unified's superintendent requested a construction loan from the Civilian Production Administration, stating that the purpose of the Broadway facility was to "relieve over-crowding in the lower grades." By July construction had begun and at the April 7, 1948 board meeting, it was resolved "that the Board of Education authorize the superintendent of schools to accept the Broadway School from the firm of E. A. Hathaway and Company as being completed in accordance with plans and specifications as of Tuesday, April 8, 1948." Since its opening in September of 1948, Broadway School has been expanded to include the other elementary grades. However, no other school has been required to handle changes in the neighborhood's population.

It must be concluded, then, that Broadway School, and the process which led to its construction, was successful in permanently (these past twenty-five years) relieving the pressure of over-crowding in the other schools in the area. Much of this success must be ascribed to the character of the neighborhood and its relatively low housing density. It is, however, a credit to Dr. Suffield and his staff that their plans were effective in bringing about the desired result. Moreover, Broadway School is today complementary to the neighborhood character and is a general asset to the Willow Glen area.

The school district, particularly in its planning role, is an agent of comprehensive change. Decisions regarding the placement of school facilities, curriculum units and even personnel practices have a total impact much broader than the artificial boundaries defined on maps. Broadway School, the exception rather than the rule, contributed to the Willow Glen community. It affected and was affected by the neighborhood. As a community institution, the school district must realize its relation to community planning and specify this relationship in its planning decisions. San Jose Unified, like most school districts, has been lax in this regard. Many of the dysfunctional aspects of present educational planning are traceable to the discontinuity between the school and the larger community.

The relationship between school and community is evident in neighborhood change. Four types of neighborhood change have occurred in San Jose Unified. In each, historically, the District has taken no initiative. Rather, it has responded to the changes as though by reflex.

One type of neighborhood change is that of "age rarefaction" such as is occurring in certain tracts of the Almaden subdivision in the extreme southern part of San Jose Unified. The semi-custom houses in these tracts cost $35,000 to $45,000 when they were built, 10 to 15 years ago. Values have increased by more than $1,000 per year, keeping housing in the area expensive and exclusive. Most of the houses have four bedrooms, some five and a few three. The population of the area is mostly professional, well-educated, and white. Because of these conditions, few very young families enter the neighborhood, and the first-owner families no longer have young children. Carried to extreme (as has happened, for example, in the Farm Hill subdivision of Redwood City in neighboring San Mateo County), the process leads to a neighborhood which needs no elementary school. In such a case, the school district may end up with an empty school plant. San Jose Unified located the Almaden Schools on the fringes of the neighborhoods which are undergoing rarefaction, rather than in their centers and thereby reduced much of the problem.

Neighborhoods may also become dilapidated, as has been the case with substantial portions of the northern third of San Jose Unified. The houses in this area are very old and are, from the standpoint of most families, located poorly. Consequently, the actual market values are depressed. The neighborhoods are not generally well taken care of; most of the people who live there are poor, and many are members of minority groups. Schools have had no direct bearing on this process. San Jose Unified has varied the staffs and the curriculum services of the schools in the area but has made no attempt to relate school plans to area goals. Though this neighborhood is vastly different from Almaden, the schools of the two areas are not distinguished in regard to planning. Little, if, indeed, any, consideration has been given the cultural, economic and intellectual variables which distinguish the northern district from the southern. Instead, planning has been based on numbers of children and population densities.

The central area of San Jose, much of which is dilapidated, is slated for renewal. The bulk of the renewal funds are going to build a financial plaza and renovate the down town section. Though no school will be immediately affected by the renewal plan, it is likely that the central schools, particularly Longfellow and Edison, someday will be. There are apparently no present plans to deal with this situation when it arises. If residential renewal is planned by the city for this area, San Jose Unified should be aware of this fact and gauge its planning efforts accordingly.

Neighborhoods such as the Edison/Longfellow area may also be industrialized and the housing displaced. This would result in the closing of schools or relocation of buildings. Again, if the district has a concrete plan of action for this contingency, it is not discernible.

Throughout San Jose Unified's history of facility planning, decisions have been made in response to a set of demographic conditions which are assumed to be beyond the reach of district influence. That the San Jose Unified School District has managed to keep abreast of its space requirements is a credit ... that it has failed to take a direct and forceful hand in community planning is a serious fault.

Gilroy Unified: A Case Study

Gilroy is the southernmost community in Santa Clara County. At the crossroads of the Santa Clara Valley, it is 28 miles from San Jose, 16 miles from the Pacific Ocean, 78 miles from San Francisco, and 40 miles from Monterey. A major highway and a railroad run through the center of town. The community of Gilroy has functioned as a service center for the surrounding agricultural area. Today, Gilroy has nearly 13,000 people. In addition to supporting farming, cattle raising, and dairying activities, it has 35 food processing and manufacturing plants with an annual payroll of 23 million dollars.

Until 1950, growth had been slow but steady since the town's incorporation, as Table 2 shows. In the twenty years between 1950 and 1970, the population increased from 4,900 to 12,665. With the continued urbanization of Santa Clara County and the growing scarcity of land for development in San Jose, Gilroy undoubtedly will experience rapid growth during the next decade. Whether or not any lessons have been learned through the "slurbanization" of other areas of Santa Clara County, described so dramatically by Belser (1970), remains to be seen.

TABLE 2

POPULATION GROWTH OF GILROY, 1870-1970
(in 1,000's)

1870	1.6	1930	3.5
1880	1.6	1940	3.6
1890	1.7	1950	4.9
1900	1.8	1960	7.3
1910	2.4	1970	12.7
1920	2.9		

Gilroy Unified School District has been in existence since 1966. It serves the town of Gilroy, and adjacent unincorporated areas. At present, it has six elementary schools, one junior high and one high school (see map on page 24) and 4,879 students as of October, 1973. Gilroy also has Gavilan Community College, opened in 1966, which currently serves 1,768 students. Fifty-four percent of the students are Spanish surnamed.

Throughout the early years of Gilroy's public school system, the process of facility planning mirrored the rural community's simple and straightforward way of life. Considering the amount of time and work required today to get from the recognition of a need for a new facility to the opening of a new plant, these old Board minutes are refreshing:

> Gilroy Board - May 10, 1868
> The old school house not being large enough to accommodate the children of said District, it was decided that we build a new one to cost $4,000, also to sell the old school house, and a portion of the lot, also to buy a portion of land of H. W. Hubbard in order to square the lot and make it extend from Church Street to Rosanna Street, also that an election should be held August 20th 1869 for the purpose of voting a tax to build a new school house.

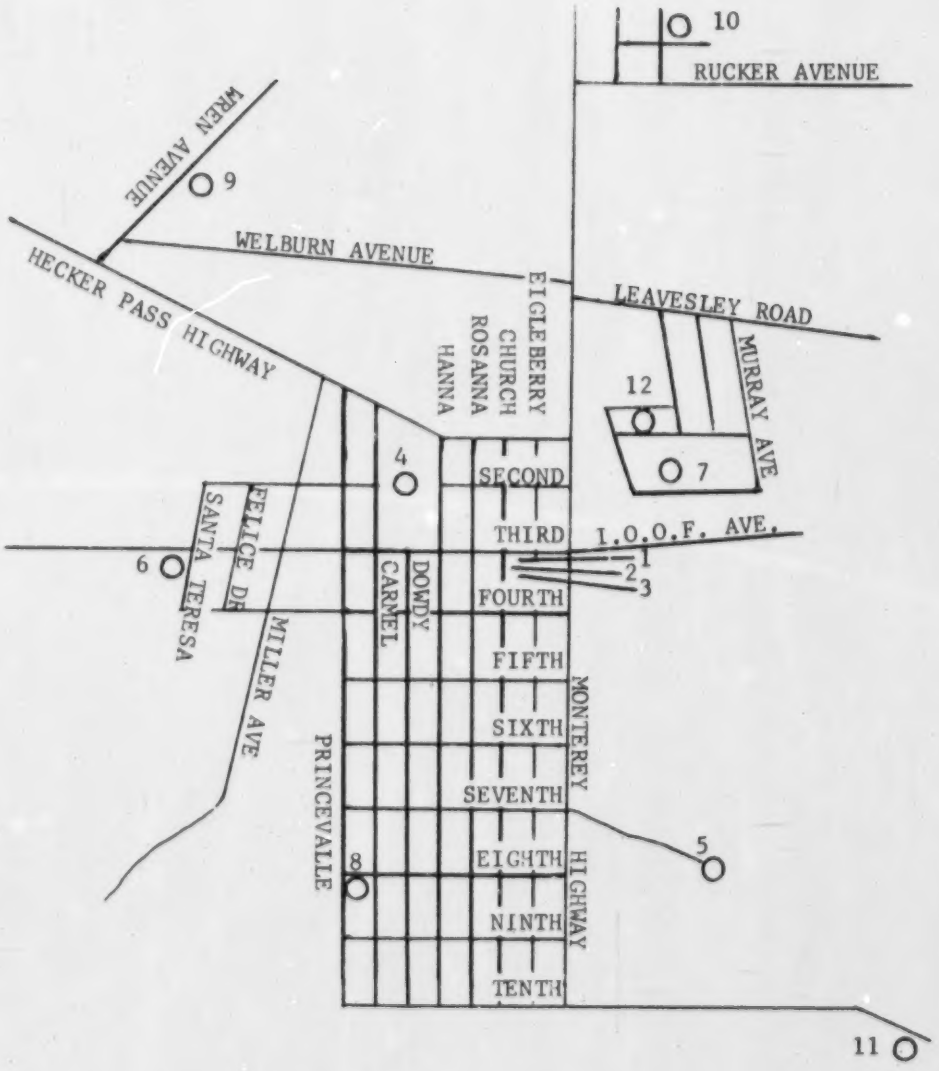
A $.70 tax was subsequently voted, and on July 10, 1869 the minutes read:

> At a district meeting, Mr. Burrows was appointed to furnish plans and specifications for the building of the new school house, also decided that we let the building of said house to the lowest responsible bidder.

During the late 1800's and early 1900's, several practices were commonly used to relieve crowding in classrooms without building new facilities. It was not unusual to promote the better students to the next department when a given classroom was crowded. In 1897, for example, teachers were directed to promote "on trial," eighth grade students with grades above 80% into high school. Sometimes the Board used what is today called "found space." In 1911, for example, the grammar school was severely overcrowded and the Board directed the Principal to see about renting a room from the old Methodist Church, provided that the rent did not exceed $100 for the ten-month school year. Gilroy's first high school, built in 1898, was not torn down until 1960. It was closed many times because of age and disrepair; however, according to Board minutes, one or two rooms were always being cleaned up and remodeled and pressed into use when an additional classroom was needed for one grade or another or when a special interest class, such as band, had no place to go.

For one hundred years, then, the Gilroy school system met the problem of overcrowding with piece-meal building and a variety of stopgap measures. Simple obstacles had been overcome with simple programs. By the early 1960's, however, Gilroy had begun to feel the effect of the county-wide population explosion. School operation was becoming much more complex. Restrictions related to zoning, building, etc., were being imposed by various governmental units. In 1964, the still not unified districts, Gilroy Elementary and Gilroy High School, turned to Stanford's School of Education for assistance.

The Stanford report, entitled "School Planning for Growing Gilroy, 1964-74," noted that growth would probably be on the west and northwest side of town, in the area between the Santa Cruz Mountains on the west and Monterey Highway on the east. In 1962, a General Plan had been adopted for the Gilroy Planning Area calling for the retention of the prime agricultural land to the east of a proposed new freeway in its present use. The 1962 General Plan showed the majority of residential



GILROY UNIFIED SCHOOL DISTRICT

1. DISTRICT OFFICE
   7663 Church Street
2. MT. MADONNA HIGH
   7663 Church Street
3. INSTR. MEDIA CTR.
   7663 Church Street
4. BROWNELL
   7800 Carmel Street
5. ELIOT
   470 Seventh Street
6. EL ROBLE
   930 Third Street
7. GILROY HIGH
   385 I.O.O.F. Avenue
8. GLEN VIEW
   600 Eighth Street
9. LAS ANIMAS
   8450 Wren Avenue
10. RUCKER
    325 Santa Clara Avenue
11. SAN YSIDRO
    2220 Pacheco Pass Hiway
12. TRANSPORTATION DEPT.

housing units to be low density, that is, 0-2 dwelling units to the acre. The Stanford report, however, predicted that because of the high cost of land, housing was more likely to be medium density. The report cautioned: "Only the strength and effectiveness of the zoning regulations will keep the development at a reasonable density level."

The General Plan had revealed that in the Gilroy Planning Area, 26,000 acres of land were suitable for development. In 1962, only 1,883 acres, or 7.2% of the total potential urban acreage, had been developed. The Stanford report (1964, p.44) had this to say about the rate of growth:

> The rate of growth is dependent on many influences, such as the general employment picture in Santa Clara County, or the date of completion of the freeway to San Jose, over which the Gilroy area has no control. It will also depend on some influences which the citizens can control--the zoning regulations and the extension of water and sewer connections, for example. With growth seemingly inevitable, the school district must plan to meet the needs which will arise from it.

The Stanford study went on to make specific recommendations for the acquisition of four sites, two for elementary plants and two for high schools. Speaking generally, the report concluded (p.46):

> Site acquisition should only be made after a thorough study of proposed street and utility plans and of the interrelationship of each of the sites to the others. Careful study must also be made each year of growth and enrollment trends. Careful planning and cooperation will enable school districts of the area to meet the needs of the future as part of an on-going program.

Subsequent to the study, two sites were acquired, one for a high school and one for an intermediate unit. These remain the only two undeveloped sites held by the District.

In the sixties, the California State Department of Education encouraged the unification of numerous small districts by providing a financial incentive to districts voting for unification. In 1966, an election united Gilroy Elementary and Gilroy High School Districts and added two single-school districts which served agricultural areas outside the town of Gilroy. In this way, Gilroy Unified increased the geographical area it served.

In 1968, a revised General Plan for the Gilroy Planning Area was adopted by the Gilroy City Council and the Gilroy City Planning Commission. The new General Plan, which covers approximately 60 square miles and includes Gilroy and surrounding incorporated areas, was prepared by Duncan and Jones, Urban Planning and Design Consultants, in cooperation with a Citizens Advisory Committee. Local educators were represented on the Advisory Committee, as were members of the Schools, Recreation and Open Space Subcommittee.

Section H of the General Plan (p.48), as well as Appendix G, provides recommendations for school plant development. Site size recommendations are 10 acres for elementary schools, 20 for intermediate schools and 50 for high schools. The Plan links school sites, where possible, to the extensive open space trail system the Plan describes. Elementary schools have been spaced on the Plan to serve a population of from 3,500 to 4,500. The Plan suggests that neighborhood centers and parks be developed in conjunction with elementary schools. In all, the Plan calls for 14 new elementary schools. Intermediate schools have been spaced on the Plan to serve populations of approximately 14,000 each, while the high schools will accommodate populations of between 20 and 25 thousand.

One other event should be mentioned that has had statewide implications for school planning while remaining outside the control of school districts--the Field Act. The earthquake precautionary measure, enacted in the 30's but not enforced until recently, requires school buildings to meet specific building standards. In Gilroy, it resulted in 26 classrooms being closed and replaced by relocatable classrooms on present sites. Although enforcement of the Field Act imposed hardships on many school districts, it provided the opportunity to reconsider the location of the affected sites in view of present needs.

As has been mentioned, school personnel were a part of the Advisory Committee developing Gilroy's present General Plan. Today, a member of the central office staff is also a member of the Gilroy Planning Commission. The present Superintendent is an active member of the Interdistrict Planning Council (IDPC), an agency consisting of county district superintendents who are attempting to influence planning decisions made by various governmental units. Recently (September, 1972) IDPC, with the assistance of the Santa Clara County Planning Department, prepared a position paper on housing as it related to the South Santa Clara County Planning Program. The South County district superintendents (Gilroy, Morgan Hill, Gavilan College) provided a statement on housing which described the legal requirements for integrated schools and which explored the relationship between housing and integration. Several recommendations were made.

In effect, then, Gilroy school personnel are beginning to take a far more active role in community planning. In order to do this, they are having to learn more about the people and agencies making decisions or having available the data and expertise to help the District plan. Conversely, the people and agencies in positions of power are learning more about the problems and concerns of Gilroy's schools in relation to the community.

Morgan Hill Unified: A Case Study

Morgan Hill lies between Gilroy, the southernmost community in Santa Clara County, and San Jose. Monterey Road (Highway 101) runs through the central business district just as it does in Gilroy. The community lies on a long, narrow strip of the valley floor and to its west are the spurs of the Santa Cruz Mountains. According to the latest census, the population of Morgan Hill is 6,485.

Morgan Hill was incorporated in 1893 and grew slowly, staying around 600 from 1910 to 1920, reaching 900 in 1930 and 1,000 in 1940. The population spurted to 1600 by 1950, to 3100 by 1960, and more than doubled by 1970 at 6500. Since it is not completely urbanized, Morgan Hill's growth potential is great. Present estimates place the town's 1980 population at 18,000.

At present, the District has eight elementary schools and one high school. Enrollment figures for October, 1972, show a total of 3,498 elementary school children, an increase of 8% over the previous year, and 1,401 secondary students. A 1971 racial/ethnic survey showed the students to be 32.6% Spanish surnamed, 6.7% members of other minority groups and 63.4% white.

The first school in Morgan Hill was in the Methodist Church (1893). Two years later, the Machado School was opened. As the story goes, three farmers were discussing the need for a school when one of them, Bernard Machado, was prevailed upon to provide a couple of acres for the school. The frame school built on the Machado site has been in use until recently when the Field Act forced its closing. The school population has been as low as 7 or 8 children and as high as 75 (during World War II). Machado remained a one-school district until 1966 when it was unified, over the "no" vote of its families, with Morgan Hill. Today, a relocatable unit at the site houses approximately 50 children, grades 1-3.

The high school district, known as Live Oak, was organized in 1904. The organization meeting included Morgan Hill School District, Paradise School District, Machado, Burnett, Packwood and San Martin. The high school began that fall in the Morgan Hill Grammar School with the principal spending one-third of his time as principal of the grammar school. In the spring of 1905, the present high school site was chosen. Despite an offer by a Board member of two acres of land in San Martin and $2,000, the facility was built in Morgan Hill. Over the years, the high school campus has been enlarged and new buildings have been added as new educational needs have developed. The present campus, like that of Gilroy's high school, displays buildings of varying ages and architectural styles.

Presently, the District has a new high school under construction East of the new freeway in an area zoned for low density housing according to Morgan Hill's General Plan, adopted in November, 1969. The principal and faculty of Live Oak worked with the architect in developing plans

for the new school. In 1968, the District obtained a no-interest planning loan for $40,000. A previous bond election (1967) failed as have three since that time. The design for the new plant meets the need for flexibility. The design is a shell with no internal load-bearing walls, and with heating, lighting and airconditioning units in the ceiling. Internal "walls" can be placed where they are needed and are so constructed that they can be taken down or put up by the District's maintenance crew.

The Morgan Hill Unified School District serves a much larger area than the city of Morgan Hill. Unification in 1966 brought together four elementary districts (some of them the results of earlier unification) and one high school district. Today, the area served by Morgan Hill Unified stretches from the Stanislaus County line to the Santa Cruz County line and includes 296 square miles. As an employee of the District pointed out, if the area had the same population density as San Francisco, it would have a population of 4,500,000 people. The size of the area and the fact that not one but several governmental jurisdictions nearby are involved (Morgan Hill, San Jose, Santa Clara County) have not made facility planning an easy task. The successive unifications, though legally accomplished, did not create a single geographic entity with a sense of common community identity.

Morgan Hill operates under a General Plan adopted in 1969. The section having to do with schools is similar to that in the Gilroy General Plan (described in the foregoing section), although it is much less specific. The Morgan Hill Plan preserves an open-space area in the east and west foothills. The agricultural area, east of the new freeway, remains low density as do some areas west of Monterey Highway. The area between Monterey Highway and the new freeway is zoned for industry while the areas immediately adjacent to Monterey Highway as it runs through town are zoned commercial. Morgan Hill is, of course, just one area served by the school district.

Morgan Hill Unified, together with Gilroy, is actively involved with the planning efforts of the Inter-District Planning Council. However, since Morgan Hill's situation appears to be more complex than Gilroy's, it will require greater effort for Morgan Hill to successfully meet the needs of the children it is expected to serve in the decades ahead.

Los Altos Elementary: A Case Study

In their book, published in 1939, the authors of California, A Guide to the Golden State describe Los Altos, then with a population of 2,000, as "noted for its gardens and country club, where houses among oaks overlook the valley orchards." The minutes of the Board of Trustees meeting for the Los Altos School District of January 6, 1969, offer this description of the community:

> The population of Los Altos and Los Altos Hills is 30,295. It is a bedroom community 38 miles south of San Francisco on the peninsula and adjacent to Stanford University. The average family income is $15,800 and the average educational level of adults is 14.2 years. There are many professional people in the community with universities, electronics and research and airlines and medical professions represented. Ninety-five percent of the children go to college and parents have high expectations of the elementary and the high school districts. The district is within the boundaries of the Mountain View-Los Altos High School District.

The school system described in this case study serves children attending kindergarten through eighth grade who reside in Los Altos, Los Altos Hills and a small portion of Mountain View. It is the history of a residential community which experienced remarkable growth within a very short period of time. Dr. O'Dell of Stanford, in a 1950 report, identified it as "a community in transition and laboring at it hard."

The town developed out of two land grants which were later divided into ranches and orchards and are now subdivided into the present residential community. An early school of record is the one created by the Taaffe family on its Purissima Ranch for the Taaffe children. Most children attended school in the nearby town of Mountain View. In 1908, the Peninsular Railroad (electric) was put into service between Los Altos, Palo Alto and the Stanford campus. The Los Altos community was by then beginning to establish its own identity, and in 1908 and 1909, its own school classes were held on the second floor of Guy Shoup's building on the corner of Main and Second. All eight grades were taught by one teacher. On February 8, 1909, the Los Altos School District was created. It covered 15 square miles and was designed to provide education for all the children in and surrounding the town of Los Altos.

In 1910, the district issued a bond for $1,500 to purchase land for a school site. Some community members felt the five citizens who backed the purchase were "profligate" spenders. The Board of Trustees would frequently experience this kind of criticism as it teetered between trying to provide adequate educational facilities and yet adhere to a tight budget and a strict list of priorities.

Prior to the period of greatest expansion following World War II,

Board members frequently took direct responsibility for contracting and supervising construction, maintenance, ordering of busses and equipment, purchase of insurance and the general supervision of personnel. As the District grew, trustees turned over the daily operation of the schools and supervision of its curriculum to the superintendent, business manager and district office staff, who replaced the teacher-principal.

During the 30's a primary concern of the Board was the structural safety of its school. At this time, communication was begun with the State Department of Architecture and the Division of Schoolhouse Planning. The latter in particular maintained a close association with the District and performed great service over a long period of time. The Board also contracted the services of an architect and, as schools and classrooms were added, a master plan for location, design and construction began to emerge.

Bond elections were both passed and defeated as the District struggled with initial growth. Committees of teachers and citizens provided input for school design as well as costs. Many of the suggestions were incorporated in the planning for future building.

In 1944, Ardis Egan became the District's first Superintendant and served until his retirement in 1964. Minutes of Board meetings indicate he was a strong leader who managed to provide facilities for the students during the period of greatest growth. The town of Los Altos became incorporated in 1950 and he and the Board established some liaison with its Planning Department during the period of growth. Egan and the Board, along with town and county planners tried to plan on the basis of growth projections and predictions of shifts in student population as housing construction continued in Los Altos. This first era, lasting from the creation of the district until the end of World War II, can be thought of as the period of the small-town school.

The next period, however, was one of dramatic growth, lasting through the 50's, beginning to level in the 60's, and starting to decline in 1967. These enrollment figures tell the story:

Year:	Enrollment	Year:	Enrollment	Year:	Enrollment
1915	90	1953	3,030	1960	5,654
1938	300	1954	3,596	1965	5,838
1940	300+	1955	4,304	1966	5,924
1945	557	1956	4,638	1967	5,597
1946	616	1957	5,012	1970	5,146
1951	1,463	1958	5,500	1971	4,871
1952	2,451	1959	5,637		

Through the 1950's, the District was hard-pressed to keep up with the student population. It could not finance and build schools fast enough to meet the demand, nor was there any training except past experience to prepare the citizens for the new problems.

In 1952, the Superintendent had to explain to his board that Los Altos had become one of the "empty pocket" districts because assessed valuation had not kept up with the population influx and birth rate. This meant that even with all the state aid possible, the District would have only "minimum educational facilities compared with the districts in the state as a whole." At this time, the assessed valuation of the District was $16,080,120.

Later in '52, the Trustees created a Building Advisory Council made up of interested citizens. With enrollment around 4,600 expected by March 1956, the group recommended both construction and site acquisition. By fall of '53, the Board had applied for six building sites under state aid. These were to be strategically placed in accordance with growth and future subdivision plans. The Master Plan for Los Altos then began to show schools and sites for future schools in accord with the District's long-range planning. Vern Hall of the State Committee on School District Reorganization, felt that schools should be built in areas considered "population centers rather than (according to) District boundaries." But the Board did not agree, being concerned with providing the small local school. They felt another plan might result in loss of control and autonomy "removing control of the schools from the people they serve."

Following a successful bond and tax election the next year, the Superintendent stated his belief that enrollment could reach 9,107 by the time the community reached saturation. The Superintendent also suggested a more accurate system for projecting areas of population growth by dividing the District into twelve areas rather than three.

During the three years that followed, the District was busy selecting sites and designing new facilities. In 1957, the Board was complimented by the County Planning Commission for securing its sites with foresight. Credit was given the Superintendent and the Citizen's Committee on Growth and Expansion for purchasing its locations before saturation. The Committee later projected an enrollment of 6,900 pupils by 1962, and declared the need for 50% more facilities in the years 1959-1961.

A year later, a bond election failed and much of the student population had to go on double session. Additions were being made to some schools and were needed at others. Eventual enrollment was still predicted to be 9,000 and it was thought at least 76 rooms would be needed by 1962 at a cost of about 2.5 million dollars.

Despite the predicted needs, however, there was resistance to higher taxes by some of the citizens, and alternatives were suggested to the recommendations of the Board and of the Committee of Growth and Expansion. A group of taxpayers recommended a bond election for $800,000 and suggested that the District drop its plan for building in 1962 and 1963. The group felt there was no indication where "future need" would be likely to occur and recommended additions to present structures rather than new buildings. The taxpayers' group considered it better to have one large school than two smaller schools. This strategy, they

contended, would also save money since only one school would have to be staffed with administrative personnel.

This kind of thinking was, of course, in contrast to the traditional approach suggested by state and local planning. The State had continually recommended the purchase of sites early and the building of a school as soon as four or more classrooms were needed in a certain locality. Following community informational meetings and a questionnaire survey which showed overwhelming support for three-year financing and a five-year-to-saturation construction program, a $2,050,000 bond election was passed in Los Altos in September of 1959.

A year later the Board was informed that it was not likely to qualify for much state aid during the next few years since its school population seemed to be leveling off and there was an increase in assessed valuation. A bond, without state aid, is difficult to repay. The Board decided to get out of the state aid program and to postpone selling any future bonds, constructing buildings as much as possible with monies generated by its tax rate. In May of 1961, a vote for a $2.44 tax rate was passed.

By the fall of that year, fourteen schools were in operation and one site was left undeveloped. Some schools had received one or more additions. Not including sites and with some rough estimates of additions and improvements, the cost to the District for this building program must have exceeded $4.3 million.

While student population peaked in 1965-66, there was still a concern for building because, as stated in a citizen's report to the Board, children residing in the District will be growing up and moving out and, as this occurs, "families with younger children will move into the district to replace them." The anticipated maximum size of the school population was now around eight thousand.

A year later, however, all earlier predictions were abandoned. Enrollment at the beginning of the 1967-68 year showed a decrease of 102 pupils. In December, a member of the Board produced a study on enrollment which showed projections that ADA might drop to 5,610 by the end of that school year and that yearly decreases of 250 to 300 would bring enrollment figures down to about 5,000 by 1969-70.

Enrollment as reported in the Directory of Santa Clara County Schools, 1972-73, is 4,638. Projections made in 1970 indicate that 4,815 students were expected to be attending in 1974-75 and 4,236 by 1978-79. It would appear that the drop in ADA may even be greater. Before such a prediction can be made, however, a great deal of data must be considered. For example, many large and expensive homes are still occupied by owners whose children have grown up and moved away. New homes continue to be built which cost upwards of $50,000 and are therefore out of the reach of younger families. Moreover, a survey of the area gives the general impression that it was developed capriciously with houses built where the price was right for the developer and buyer. As a result of this

practice, new developments surround open areas.

The County Planning Department reports that the assessed valuation for Los Altos was $84,530,000 for 1971-72 and $30,405,000 for Los Altos Hills for the same period. Mountain View, a small portion of whose population is served by the Los Altos District, reports an assessed valuation for the school district as of March, 1971 of $131,517,000 net and $25,200 per student. The Los Altos District, in 1970-71, had the largest number of dollars per ADA among districts in the county with a student population over 500.

The community seems interested in its school system. The citizens, primarily white, upper middle class and college educated, have high aspirations both for their children and for their schooling. More than 75% of the fourth, sixth and seventh grade pupils scored above the national average on a standardized general ability test given in 1969. A citizens' committee which worked on curriculum in the 1950's expressed the desire that the children be taught the "basics," be given the desire to learn, and be taught discipline. Board meetings are well attended. Community members have served on committees, attended meetings with the Trustees, and, even though they may vote in opposition, participate in the tax and bond elections.

It is suggested that the population represented here is one which has inherited a concept of traditional education. Members of the community expect their children to be served as they were served. They consider schooling in its traditional form a path to success. Some comments made at Board meetings suggest that innovation comes slowly. Several times when the District was in the eye of a storm, a citizen or consultant would encourage innovation--the use of new teaching methods, new ways for using existing space, or use of portable classrooms--in order to deal with a growing or shifting population. These ideas were accepted, but only after considerable delay. It took time for an idea to become a part of the traditional system.

For a community so involved in its school system, it is interesting that it did not have the same involvement with those who controlled the city and county planning. The community was controlled rather than controlling. All the Board, Superintendent, and citizens could do was react to the growth which was planned for them. Speculation had to be made about the future, but no one sought to control it. The District's actions were reactive rather than deliberate. It did well to maintain its balance during the period of rapid growth.

PART THREE: CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE SCHOOL PLANNING

The overwhelming fact of modern life is change. It took from the origin of man to 1850 A.D. for the world's population to reach one billion; between 1850 and 1925 another billion was added. The third billion was added in only 37 years and in the 13 years between 1963 and 1975, a fourth billion will be added. One-fourth of all the people who have ever lived are living today ! Futurists say that by 1984, when today's first graders graduate from high school, half the labor force of the United States will be employed at jobs that do not even exist today.

Change is systemic, comprehensive. The invention of the automobile changed not only transportation patterns but the shape of cities, the economy and methods of production. Even small changes, zonings, for example, echo far beyond the limitations of the situational particulars. Change must be understood as a dynamic of the whole.

The school district, particularly in its planning role, can be an agent of comprehensive change. When change is initiated, promoted and controlled in an orderly manner, or, more realistically in today's context, when some degree of order is brought to inevitable change, planning occurs. Flawn (1970) has described planning as "an intellectual process wherein 1) data are analyzed and 2) a program is formulated to bring about the desired result."

In reviewing the early development of education in this country as well as in Santa Clara County, it becomes apparent that little real planning, in the sense described in the previous paragraph, occurred. Rather, much of the "planning" was a reaction to an event or set of events which the professional educator either could not control or did not control.

Influencers, Indicators and Some Hypotheses

A review of the first two sections of this paper reveals a number of indicators, or signals, that change has occurred or will occur in the educational processes or institutions. A closer review further reveals the existence of conditions or events which occurred before the indicator of change. These conditions/events might be called influencers. It is the contention of this paper that a causal relationship exists, or can be inferred, between influencers and indicators. The following table lists some examples of indicators and influencers that have been drawn from the earlier sections of this paper.

Using the information presented in Parts One and Two and in Table 3, it is possible to develop several hypotheses concerning educational facility planning:

> Hypothesis One: Districts will be relatively insensitive to influencers even though there may be a cluster of them related to the same issue and even though they may persist over a period of time.

TABLE 3

INDICATORS AND INFLUENCERS

INFLUENCERS	INDICATORS	REACTIONS
population increases	overcrowded classrooms	stop-gap measures, piece-meal additions and construction
public's reluctance to pass bonds and tax increases	district's tendency to acquire inexpensive or free sites	poorly located and inappropriate plants
nat'l trend toward standardization of course work and method of instruction	standardization of facility design	replication of Mid-Western and Eastern design, with no reflection of Calif. climate, geography, etc.
educational trend toward physical education and vocational training	support from federal government	additions of gyms, shops and domestic science centers
uncontrolled development of subdivisions	scattered population centers and low tax base	district expansion to raise tax base...resulting in crowded classrooms, busing and loss of community identity
clustering of low and high income residential areas	segregated schools	compensatory education and busing
concentration of groups with high aspirations and life styles	optimistic projections of growth, concentration on academic studies	over-building and lack of career programs

Perhaps the influencers that districts have been least responsive to have been those related to increases and decreases in the population served. Gilroy, for example, has never really planned for increases in the school age population. This was true despite the fact that the town itself was increasing in size, that more acreage was under cultivation and large ranchos were being subdivided and bought by farmers, and that industries related to agriculture were continually moving into the area. More recently, the rapid growth of San Jose has further influenced the movement of people toward South County. Despite all these influencers related to increasing population, Gilroy has historically reacted only after more students have appeared than could be comfortably housed in available facilities.

Conversely, Los Altos has, in recent years, found itself with a declining school enrollment and a need to dispose of schools. Influencers pointing toward the decline have been present since 1966 and before, and yet only recently have they been acknowledged. The greatest single influencer was the level of investment of Los Altans in their homes and community. The assumption, as stated earlier, was that once the children left home, the parents would sell their homes to young marrieds who were just starting their families. This, however, has not been the case. The high cost of the area's homes, combined with the phase-out of aerospace and defense jobs that brought young professionals in, has lead to a steady decline of school-age children. The problems experienced by Los Altos are characteristic of expensive suburban communities elsewhere.

Hypothesis Two: Only when an indicator of change appears will a district react.

Federal/state priorities and legislation may serve as examples of indicators that force changes in educational institutions even when the related influencers have little effect. For example, education and the "right" to an education seem to have been a notion that historically was a part of our development as a nation. However, since education of the young child was seen as preparation for entrance to higher education, the "right" to an education was not seen initially as appropriate for girls, the poor, members of minority groups, etc. The passage of the Compulsory Education Act itself did not insure that all children would be educated, and it was not until procedures for enforcing the Act were developed and implemented did education for all come closer to being a reality. In Gilroy, for example, the Census Marshal took his count of "eligible children" as required by law, but a number of years passed before anyone became concerned about the disparity between the number of eligible children and the number actually attending. In 1870, a resident appeared before the Gilroy Board on behalf of several Negro children of school age. It was the Board's contention that California law did not apply to Negro children and that the District had no obligation to educate them. They were not admitted.

Although the concept of equality has been a part of our ideal of democracy, equality has not, in fact, existed. A number of influencers resulted in the Civil Rights Act of 1964. Districts must now assure the federal and/or state governments that they are "in compliance" in order to receive categorical aid funds. Even so, school districts have developed many ways of circumventing the requirements. As a result, California requires racial/ethnic data for students and staff and a "desegregation plan" in order for projects for certain categorical aid funds to be approved.

Three of the districts under study, Gilroy, Morgan Hill, and San Jose Unified School Districts, have always had large numbers of Spanish-speaking children. It is only in the last few years that organized attention has been given to the special educational needs of these children, and that attention has resulted from financial incentives given through legislation such as the several titles of the Elementary and Secondary Education Act, and in California, the Bilingual Education Act of 1972, SB 90-72, and the Early Childhood Education Act.

Although it may seem unfair to say that a school district will act or react only when an indicator of change appears, the facts suggest that educators and their boards do not do a good job of reading the signals and planning for change themselves. Rather, districts seem to need to be forced to change. Given these conditions, real planning cannot occur.

> Hypothesis Three: The lag time between indicator and reaction is a function of the power of the indicator.

In reviewing the indicators described, it is obvious that some have greater "power" than others. Legislation, particularly if it has incentive or threat enough, effects change more rapidly than a stated or implied priority. For example, the recent legislation to bring about enforcement of the Field Act of the 1930's resulted in the 1972-73 school year in the closing of a number of older buildings that do not meet specified criteria. San Jose Unified and Gilroy Unified were particularly hard hit. Schools closed had not met requirements earlier but districts simply failed to make plans to repair or replace buildings until forced to do so. An earthquake was responsible for each piece of legislation.

On the other hand, trends--educational and otherwise--have little effect on educational institutions for long periods of time. For example, prefabricated or portable units have been widely used since World War II. Even so, Los Altos, for example, could not accept the concept of portable units as a means of dealing with their shifting population problem.

Individualization of instruction, that is, the use of diagnosis and prescription, measurable learning objectives, multi-modal activities, etc., has been with us for at least ten years. In the districts studied, while some teachers individualize their instruction, it cannot be said

that individualization is a common practice.

While year-round schools represent one alternative to overcrowding, none of the districts studied has tried a year-round plan.

The "power" of an indicator seems to be tied to threat--particularly financial threat. If the indicator relates to doing a more effective or efficient job of educating, but no coercion by any agency or the public is involved, it may take a long time for it to cause any change in the educational institution.

> Hypothesis Four: A district will tend to react to an indicator but continue to ignore the related influencers.

Perhaps the best proof of this hypothesis lies in the segregation issue. An early influencer pointing towards segregated schools was the uncontrolled clustering of low and high income housing. Not until an indicator of change appeared--in this case, segregated schools--did the districts react. And by then, of course, only such steps as busing and compensatory education could be employed to meet the problem. Only recently have the districts begun focusing their efforts on subdivision planning, and thus have begun to attack the causes of segregated schools.

Another proof may be seen in the districts' reactions to bond and tax election failures. Traditionally, little has been done to understand the reasons behind the failures or to attempt to influence the real power base in the community that could have helped swing the election. Too often, districts have ignored the influencers and have instead taken the line of least resistance. They have chosen inexpensive but poorly located sites and, in some cases, have accepted free sites in the middle of developments whose school-age population will not be replaced in years to come.

> Hypothesis Five: Even when a district is aware of influencers and responds to them, i.e., initiates planning, the district will fail to look at all of the relevant influencers.

Los Altos responded to the population growth in the district but did not consider the nature of the population, the experience of other high-income communities relative to turnover rates of homes, or the effect of the national trend toward reduced family size. Too, although the education personnel and the Board looked for immediate solutions to their overcrowded school conditions, there is no evidence that any efforts were made to influence the decisions of governmental bodies who were approving additional housing units.

Gilroy and Morgan Hill have been sensitive to the fact that agricultural land is being developed for homes and industry and have responded by trying to "keep up" with growth. However, it has only been recently that they have been sensitive to the land-use plans for their areas and have attempted to become involved with the key local governmental decision makers. At the same time, they have been somewhat less responsive to the nature of the new

population, its interests and needs, and its effect on the total school community.

In summary, we can only conclude that until very recently, school districts have done little planning, as planning has been defined in this study. Rather they have tended to react in an effort to regain their equilibrium once change has occurred. They have not tried to "initiate, predict and control change." A basic assumption always operating has been that if schools could only optimize what they presently have, the ideal would be attained. Too, districts have tended to function as autonomous, closed systems rather than as a part of a broader socio-political unit. The "planning" model in operation has been a static one.

Recommendations for Future Planning

Quite obviously the day when a school board could instruct the superintendent to "order a school" has long since passed. Our society has become vastly more complex and change is rapid. Keeping up with change is no longer good enough. Planning is a necessity if public education is to survive.

On the basis of the present study, we offer several recommendations.

First Educational planning requires that a person with appropriate training be given the planning assignment as a part of his regular job, and not in addition to other unrelated duties. In a large district, planning may be the full-time assignment of one or more persons. In the districts studied, as in most other districts around the nation, the planning function is an extra-duty assignment given to an employee in the business office, the curriculum department, or even to the superintendent himself. Rarely does the planner have special training or the benefit of professional consultation.

Second The planning function should be an ongoing one. Since school communities are not static entities, planning should not be begun only when a new school facility is needed. Nor should a "comprehensive plan," such as the one outlined by the California State Department of Education, be completed merely to satisfy a requirement and then shelved.

Third School people need to learn to use resources available from other agencies. Characteristically, districts behave as though the only data available were that which they generate. Census data and data available from other governmental bodies--to say nothing of the planning expertise of these agencies--must be considered as essential raw materials for decision-making by educational planners.

Fourth School districts must recognize that they have, or can have, power. Too often, districts behave as though they had no power and

could therefore only react and complain. Districts, independently or together, can and must influence the decisions of local, state and federal legislatures. The ability to control is an important ingredient of planning, and the school community cannot achieve sufficient control acting alone.

Fifth Educational planning must involve other people besides professional educators. For many years we in education have told parents, "these are your schools," and yet we often behave as though the schools belonged to us. Members of the community must be involved in all aspects of educational planning. This includes children, their parents, and residents whose taxes support our schools even though they may have no children in school. Within the districts, teachers and para-professionals must also take part. Board members, too, need to be actively involved in the planning process and not just in the decision-making process.

Sixth Planners must be more future-oriented and sensitive to all the influencers and indicators of change. Planning efforts are seriously endangered when we look at only a few variables and ignore all the others. A demographic community profile, for example, can be just as sterile as the old scorecard for rating schools. In planning, we must continually ask ourselves if all the relevant variables have been considered.

A dynamic and complex process, educational planning offers school districts the chance to have more control of their own futures and to educate children better.

REFERENCES

American Association of School Administrators. Planning America's School Buildings. Washington, D.C.: AASA, 1960, 229 pp.

Belser, Karl. "The Making of Slurban America." Cry California, Fall, 1970, pp. 1-18.

Bursch, Charles. "Planning and Building Schools," in The Elementary School at Mid-Century, the 23rd Yearbook of the California Elementary School Administrator's Association, 1951.

California Department of Public Instruction. School Architecture in California. Sacramento: State Printing Office, 1914, 64 pp.

California Society of Secondary Education. California School Directory, Berkeley: California Society of Secondary Education, 1930, 270 pp.

California State Board of Education. Directory of Secondary and Normal Schools for the School Year 1915-16. Sacramento: California State Printing Office, 1916, 172 pp.

California State Board of Education. Directory of Secondary and Normal Schools for the School Year 1918-1919. Sacramento: California State Printing Office, 1918, 172 pp.

California State Board of Education. Directory of Secondary and Normal Schools for the School Year 1919-1920. Sacramento: California State Printing Office, 1919, 199 pp.

California State Board of Education. Directory of Secondary and Normal Schools for the School Year 1920-1921. Sacramento: California State Printing Office, 1920, 209 pp.

California State Department of Education. Bureau of School Planning. Guide for the Development of a School District Long Range Comprehensive Master Plan. Sacramento: Office of State Printing, 1971, 37 pp.

California State Department of Education. Forty Years of School Planning. Sacramento: 1969, 47 pp.

California State Department of Education. To Plan a School. Sacramento: Office of State Printing, 1971, 21 pp.

Carrol, Mary Bowden. Ten Years in Paradise. San Jose: Popp and Hogan, 1903

Caughey, John Walton. California. New York: Prentice-Hall, Inc. 1940, 680 pp.

Childers, Laurence Murrell. Education in California Under Spain and Mexico and Under American Rule to 1851. Unpublished M.A. Thesis, University of California at Berkeley, 1930, 237 pp.

Conrad, M.J., et al. School Plant Planning, An Annotated Bibliography. Columbus, Ohio: Ohio State University, 1969, 204 pp.

County of Santa Clara Planning Department. A Study of the Economy of Santa Clara County, California. Part I, 1967, 36 pp.

County of Santa Clara Planning Department. "INFO Commentary," 1967-72.

Craig, Martha A. "History of the Franklin-McKinley School District." Local History Studies. Spring, 1969, pp. 37-49. (A publication of the Foothill Junior College District, California History Center, Los Altos, California.)

Cubberly, Ellwood P. An Introduction to the Study of Education and to Teaching. Cambridge: Riverside Press, 1925, 476 pp.

Cunningham, Florence R. Saratoga's First Hundred Years. San Jose: Harlan-Young Press, 1967.

Dost, Jeanne. "Reassessment of the School Location Problem: A Multi-Functional Role for the School in the Urban Environment." Paper presented at Western Regional Science Association Meeting, San Diego, California, 1968.

Duncan and Jones. 1985: General Plan. Berkeley: 1968, 105 pp.

Federal Writers Project. California: A Guide to the Golden State. New York: Hastings House, 1939, p. 378.

Ferrier, William Warren. Ninety Years of Education in California: 1846-1937. Oakland: West Coast Printing Company, 1937, 413 pp.

Ferris, David Frederic. Judge Marvin and the Founding of the California Public School System. University of California Publications in Education, Volume 14. Berkeley: University of California Press, 1962.

Foote, H.S. (Ed.) Pen Pictures from the Garden of the World. Chicago: Lewis Publishing Company, 1888, 672 pp.

Gilroy Dispatch. (various back issues dealing with area schools)

"Gilroy High School--1899-1900." (brochure, undated)

"Gilroy School History: A Short History of the Past and Present of the Gilroy Schools--1853-1888." Gilroy: Gilroy Gazette, 1888.

"Gilroy: The Home of the Prune." (brochure, undated but probably 1913 or 1914)

Heller, Alfred (Ed.) "The California Tomorrow Plan--Revised Edition." Cry California, Summer, 1972.

Herron, Laura. An Educational History of Santa Clara County. Unpublished M.A. Thesis, University of California at Berkeley, 1916, 116 pp.

Johnson, Paul C. (Ed.) The California Missions: A Pictorial History. Menlo Park, California: Lane Book Company, 1964, 232 pp.

Los Altos School District, Minutes of the Board of Trustees, 1915, 1972.

Mangold, George B. Building a Better San Jose: A Social Survey. San Jose: Wright-Eley Printing Company, 1930, 163 pp.

Mank, Sally and Muhly, Burt. "Housing: South Santa Clara County Planning Program." September, 1972.

Marvin, John G. First Annual of the Superintendent of Public Instruction, 1851. A Report to the California State Legislature. Vallejo, California: January 5, 1952.

"Morgan Hill General Plan." November, 1969.

Reed, Bob. A Primer for Planners. Washington, D.C.: American Association of Junior Colleges, 1967, 51 pp.

Rice, Bertha M., "Los Altos School District," and The Children of our Valley, San Jose, 1957, pp. 39-43.

"Rucker School--1894-1966." (booklet, 1966)

San Jose Chamber of Commerce. Santa Clara County, California: "The Valley of Heart's Delight." San Jose: Rosicrucian Press, 1931.

San Jose Public School Directory for 1901-1902. San Jose: The Sketch Company, 1902.

"Santa Clara County and Its Resources: Historical, Descriptive, Statistical--A Souvenir of the San Jose Mercury," San Jose, 1896.

Santa Clara County Office of Education, Department of Attendance and Juvenile Services, various reports of school district data.

"San Ysidro School District, 1859-1966." (booklet, 1966)

Sawyer, Eugene T. History of Santa Clara County, California with Biographical Sketches of the Leading Men and Women of the County Who Have Been Identified with Its Growth and Development from Early Days to the Present. Los Angeles: Historic Record Company, 1922, 1692 pp.

Staffelbach, E.H. and Lentz, A.E. Handbook of Facts: California Public Schools. San Francisco: California Teachers Association, 1940, 63 pp.

Stanford Environmental Law Society. San Jose Land Use Study. Stanford, California: 1970.

Stanford University, School of Education. School Planning for Growing Gilroy, 1964-1974. Stanford: 1964.

State of Pennsylvania. "Long Range Planning for Public Schools," Report prepared for ESEA, Title III, Grant #2938, 1968, 16 pp.

Swett, John. History of the Public School System of California. San Francisco: A.L. Bancroft and Company, 1876, 246 pp.

Theodores, James L., et al. Crisis in Planning. Columbus: Council of Educational Facility Planners, 1968, 36 pp.

Waterbury, Kenneth B. "Long-Range Planning for Public Schools, Presenting an Outline to Indicate Scope of Long-Range Developmental Program, 1967-77," Butler (Pa.) County Board of School Directors, 24 pp.